

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A high-stability, low emission, fuel emulsion composition for a reciprocating engine comprising:
  - a) 26-50% by weight purified water;
  - b) ~~50-74%~~ 49-73% by weight hydrocarbon petroleum distillate; and
  - c) ~~2-9% by weight antifreeze; and~~
  - d) an emulsification system having at least one of between about 1,000 and about 3,000 ppm nonylphenol ethoxylate, between about 100 and about ~~300~~ 3000 ppm octylphenoxypolyethoxyethanol, ~~between about 1,000 and about 3,000 ppm~~ ~~octylphenol aromatic ethoxylate~~, between about 1,000 and about 2,000 ppm ethoxylated alkyl phenol, and further having between about 1,000 to about 4,000 ppm ammonium nitrate, said emulsification system being at least 76% phenol based and wherein materials in said emulifisication system are calculated by percentage by weight of a finished fuel and total no more than 1% of said finished fuel.
2. (Cancelled)
3. (Previously Presented) The fuel emulsion composition of claim 1 comprising 30 - 35 % by weight purified water.
4. (Original) The fuel emulsion composition of claim 1 wherein said purified water is purified using reverse osmosis, distillation, or ion exchange processes.

5. (Original) The fuel emulsion composition of claim 4 wherein said water is purified using reverse osmosis.

6. (Previously Presented) The fuel emulsion composition of claim 1 wherein said hydrocarbon petroleum distillate is high paraffinic having a aromatic content of less than 3%.

7. (Original) The fuel emulsion composition of claim 1 wherein said hydrocarbon petroleum distillate is diesel fuel.

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Previously Presented) The fuel emulsion composition of claim 1 further including a lubricant that comprises one or more C12 to C22 backbone chains having an adducted acid, wherein each said adducted acid is selected, independently from the other, from the group consisting of mono-phosphoric acid, di-phosphoric acid, tri-phosphoric acid, mono-carboxylic acid, di-carboxylic acid and tri-carboxylic acid.

12. (Original) The fuel emulsion composition of claim 11 wherein said lubricant further comprises an alkanolamine neutralizer.

13. (Original) The fuel emulsion composition of claim 12 wherein said adducted acid is mono- di- or tri-carboxylic acid.

14. (Original) The fuel emulsion composition of claim 12 wherein said alkanolamine neutralizer is amino methyl propanol.

15. (Previously Presented) The fuel emulsion composition of claim 1 further including a corrosion inhibitor that is an aminoalkanoic acid.

16. (Previously Presented) The fuel emulsion composition of claim 1 wherein said antifreeze is an organic alcohol.

17. (Original) The fuel emulsion composition of claim 16 wherein said antifreeze is methanol.

18. (Cancelled)

19. (Cancelled)

20. (Original) The fuel emulsion composition of claim 18 wherein said ignition delay modifier comprises ammonium nitrate.

21. (Cancelled)

22. (Not Entered) The fuel emulsion composition of claim 1, wherein said ammonium nitrate acts primarily as an ignition enhancer at about 0.1 % by weight to about 0.4 % by weight.

23. (Not Entered) The fuel emulsion composition of claim 1, wherein said ammonium nitrate acts primarily as an emulsion stabilizer at about 0.04 % by weight to about 0.1 % by weight.

24. (Not Entered) The fuel emulsion composition of claim 11, wherein said lubricant is neutralized with an alkanolamine to form a water soluble salt.

25. (Not Entered) The fuel emulsion composition of claim 11, wherein said adducted acid acts primarily as a lubricant at about 0.04 % by weight to about 0.1 % by weight.

26. (Not Entered) The fuel emulsion composition of claim 12, wherein said alkanolamine neutralizer reduces corrosion.

27. (Not Entered) The fuel emulsion composition of claim 16, wherein said antifreeze is present at about 2% by weight to about 9 % by weight.

28. (Not Entered) The fuel emulsion composition of claim 1, further comprising:  
biocides in said additive package.

29. (Not Entered) The fuel emulsion composition of claim 1, further comprising:  
antifoam agents in said additive package, said antifoam agents are present at less than about 0.0005% by weight.

30. (New) The fuel emulsion composition of claim 1 wherein a portion of said purified water includes an antifreeze that is 2-9% by weight of said finished fuel.